

INTERNATIONAL SEARCH REPORT

International Application No

EP 03/11012

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B27N1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B27N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 969 454 A (THORNBUR WILLIAM ET AL) 13 July 1976 (1976-07-13) column 1, line 50 -column 2, line 25; claims; figures; example 2	1-4
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 452 (M-1180), 18 November 1991 (1991-11-18) & JP 03 193404 A (MATSUSHITA ELECTRIC WORKS LTD), 23 August 1991 (1991-08-23) abstract	
A	PATENT ABSTRACTS OF JAPAN vol. 010, no. 323 (M-531), 5 November 1986 (1986-11-05) & JP 61 130002 A (KOYO SANGYO KK), 17 June 1986 (1986-06-17) abstract	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

19 January 2004

Date of mailing of the international search report

29/01/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DATABASE WPI Section Ch, Week 198109 Derwent Publications Ltd., London, GB; Class A81, AN 1981-14528D XP002267266 & JP 55 164142 A (EIDAI CO LTD), 20 December 1980 (1980-12-20) abstract</p>	
A	<p>US 6 321 804 B1 (MANGOLD CHRISTOPHER) 27 November 2001 (2001-11-27)</p>	
A	<p>DE 199 13 589 A (SIEMPELKAMP GMBH & CO) 28 September 2000 (2000-09-28)</p>	

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Information on patent family members

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PCT/EP 03/11012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3969454	A	13-07-1976	CA 970267 A1	01-07-1975
JP 03193404	A	23-08-1991	NONE	
JP 61130002	A	17-06-1986	NONE	
JP 55164142	A	20-12-1980	NONE	
US 6321804	B1	27-11-2001	US 6412530 B1	02-07-2002
DE 19913589	A	28-09-2000	DE 19913589 A1	28-09-2000
			AU 4108400 A	16-10-2000
			DE 10080728 D2	14-02-2002
			WO 0058089 A1	05-10-2000